

DT03 Rec'd PCT/PTO 11 JAN 2005

PTO/SB/21 (05-03)

Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/501,442 ✓	
	Filing Date	July 13, 2004	
	First Named Inventor	Janne KEROVUO	
	Art Unit	unassigned	
	Examiner Name	unassigned	
Total Number of Pages in This Submission	9	Attorney Docket Number	D2000-1WUS

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form - 2 copies	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	- Form PTO-1449 (3 pages + duplicate)
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	- 53 references
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	- Return receipt postcard
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	Customer No. 20962	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Lynn M. Linkowski, Reg. No. 47,320
Signature	
Date	January 6, 2005

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Lynn M. Linkowski, Reg. No. 47,320		
Signature		Date	01/06/2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PATENT
ATTORNEY DOCKET NO.: D2000-1WUS

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia, 22313-1450, on January 6, 2005.


Lynn Linkowski

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	KEROVUO et al.	Art Unit:	unassigned
Application No.:	10/501,442	Examiner:	unassigned
Filed:	July 13, 2004	Conf. No:	8134
Title:	A Pectate Lyases, Nucleic Acids Encoding Them and Methods for Making and Using Them		

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Arlington, V.A., 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98

Dear Sir:

In accordance with 37 C.F.R. §1.97 & 1.98, Applicant submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents are also submitted herewith. The Examiner is requested to make these documents of record.

The Information Disclosure Statement is submitted:

Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.

In re Application of:

KEROVUO et al.

Application No.: 10/501,442

Filing Date: July 13, 2004

Page 2

PATENT

Attorney Docket No.: D2000-1WUS

Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein. A duplicate copy of the Form PTO-1449 is included herein for the Examiner's convenience.

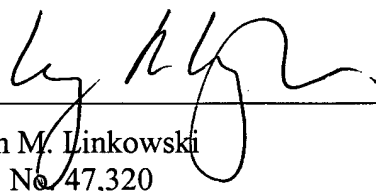
The information contained in this Information Disclosure Statement under 37 C.F.R. §1.97 & 1.98 is not to be considered as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

Although no fee is deemed necessary in connection with the filing of this Information Disclosure Statement, the Commissioner is hereby authorized to charge any fees associated with this communication or credit any overpayment to Deposit Account No. 50-0661.

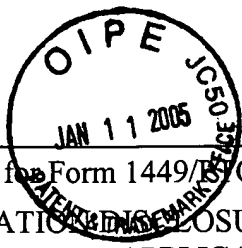
Respectfully submitted,

Date: 1/6/05

Diversa Corporation
Intellectual Property Department
P.O. Box 910550
San Diego, CA 92121
Customer No. 29062



Lynn M. Linkowski
Reg. No. 47,320
Telephone: (858) 526-5450
Facsimile: (858) 526-5950



Substitute for Form 1449/PTO

INFORMATIONAL ENCLOSURE STATEMENT BY
APPLICANT

(Use as many sheets as necessary)

Application Number 10/501,442

Filing Date July 13, 2004

First Named Inventor KEROVUO, Janne

Docket Number D2000-1WUS

Examiner Name To Be Assigned

Art Unit To Be Assigned

Mailing Date Januray 6, 2005

U.S. PATENT DOCUMENTS

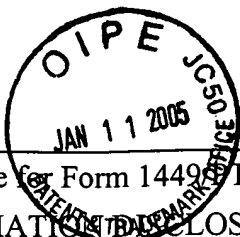
Examiner Initials	Cite No. ¹	Publication Date (MM-DD-YYYY)	Document No. Number-Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	11/29/1988	4,788,066	Witt	
	2.	12/10/1996	5,582,681	Back, et al.	
	3.	02/25/1997	5,605,793	Stemmer	
	4.	01/20/1998	5,709,796	Fuqua, et al.	
	5.	11/03/1998	5,830,696	Short	
	6.	08/17/1999	5,939,250	Short	
	7.	11/09/1999	5,980,581	Patterson, et al.	
	8.	01/25/2000	6,017,751	von der Osten, et al.	
	9.	02/08/2000	6,021,536	Wasinger, et al.	
	10.	02/15/2000	6,024,766	Wasinger	
	11.	05/23/2000	6,066,233	Olsen, et al.	
	12.	06/20/2000	6,077,316	Lund, et al.	
	13.	03/06/2001	6,197,070 B1	Horner, et al.	
	14.	06/05/2001	6,241,849 B1	Franks	
	15.	07/17/2001	6,261,828 B1	Lund	
	16.	07/24/2001	6,264,925 B1	Fuglsang, et al.	
	17.	10/30/2001	6,309,871 B1	Outtrup, et al.	
	18.	12/11/2001	6,329,333 B1	Merz, et al.	
	19.	12/25/2001	6,333,301 B1	Kamiya, et al.	
	20.	04/02/2002	6,365,561 B1	Vinson, et al.	
	21.	04/09/2002	6,368,843 B1	Andersen, et al.	
	22.	06/04/2002	6,399,561 B1	Schneider, et al.	
	23.	07/10/2001	6,258,590 B1	Lange, et al.	

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. ¹Applicant's unique citation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

SEND COMPLETED FORM TO: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



Substitute for Form 1449 TO INFORMATIONAL DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Application Number 10/501,442	Filing Date July 13, 2004
	First Named Inventor KEROVUO, Janne	
	Docket Number D2000-1WUS	
	Examiner Name To Be Assigned	Art Unit To Be Assigned
	Mailing Date Januray 6, 2005	

	24.	06/15/1999	5,912,407	Miller, et al.	
	25.	12/19/2000	6,162,260	Liu, et al.	
	26.	06/04/2002	6,399,351 B1	Bjornvad, et al.	
	27.	08/06/2002	6,429,000 B1	Andersen, et al.	
	28.	06/25/2002	6,410,064 B1	Akazawa	
	29.	02/13/2001	6,187,580 B1	Andersen, et al.	
	30.	04/24/2001	6,221,406 B1	Meschonat, et al.	
	31.	04/22/2003	6,551,358 B2	Miller, et al.	
	32.	10/03/2002	2002/0142438 A1	Andersen, et al.	
	33.	08/22/2002	2002/0115194 A1	Lange, et al.	
	34.	02/27/2003	2003/0040454 A1	Cuperus, et al.	

FOREIGN PATENT DOCUMENTS

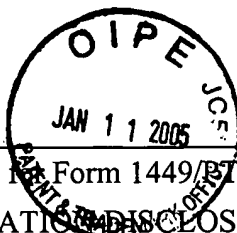
Examiner Initials	Cite ¹ No.	Publication Date (MM-DD-YYYY)	Document No. Country Code ³ - Number ⁴ -Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	35.	07/28/1993	EP 0552728 A1	Japan Tobacco Inc.		
	36.	10/17/2002	WO 02/081815 A2	Novozymes A/S		
	37.	11/21/2002	WO 02/092741 A2	Novozymes A/S		
	38.	01/09/2003	WO 03/002705 A1	Novozymes North America, Inc.		
	39.	01/09/2003	WO 03/002810 A1	Novozymes North America, Inc.		
	40.	06/01/1995	WO 95/14807 A1	Novo Nordisk A/S		
	41.	01/16/1997	WO 97/01629 A1	Novo Nordisk A/S		
	42.	06/11/1998	WO 98/24965 A1	Novo Nordisk Biochem North America, Inc.		

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. ¹Applicant's unique citation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

SEND COMPLETED FORM TO: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



Substitute Form 1449/PTO INFORMATIONAL DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Application Number 10/501,442	Filing Date July 13, 2004
	First Named Inventor KEROVUO, Janne	
	Docket Number D2000-1WUS	
	Examiner Name To Be Assigned	Art Unit To Be Assigned
	Mailing Date Januray 6, 2005	

NON PATENT LITERAURE DOCUMENTS

Examiner Initials	Cite ¹ No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, volume-issue number(s), page(s), publisher, city and/or country where published.	T ⁶
	43.	AL-HOOTI, "Chemical composition and quality of date syrup as affected by pectinase/cellulase enzyme treatment, <i>Food Chemistry</i> , 2002, 79:215-220.	
	44.	BARTLING, "Synergism between <i>Erwinia</i> pectate lyase isoenzymes that depolymerize both pectate and pectin", <i>Microbiology</i> , 1995, 141:873-881.	
	45.	ESSA, et. al., "Effect of macerate enzymes on the yield, quality, volatile compounds and rheological property of prickly pear juice", <i>Nahrung/Food</i> , 2002, 46(4):245-250.	
	46.	ESSA, "Effect of pectinase enzyme treatment on the rheological, physical and chemical properties of plum, banana and guava juices", <i>Polish Journal of Food and Nutrition Sciences</i> , 2002, 11(3):13-19.	
	47.	HOONDAL, et. al., "Microbial alkaline pectinases and their industrial applications: a review", <i>Applied Microbiology and Biotechnology</i> , 2002, 59:409-418.	
	48.	HURLBERT, et. al., "Differences in the solution structures of the parallel β -helical pectate lyases as determined by limited proteolysis", <i>Biochimica et Biophysica Acta</i> , 2002, 1599(1-2):9-20.	
	49.	ANGAYARKANNI, et. al., "Improvement of Tea Leaves Fermentation with <i>Aspergillus</i> ssp. Pectinase", <i>Journal of Bioscience and Bioengineering</i> , 2002, 94(4):299-303.	
	50.	MALATHI, et. al., "In Vitro Evaluation of Nonstarch Polysaccharide Digestibility of Feed Ingredients by Enzymes, <i>Poultry Science</i> , 2001, 80(3):302-305.	
	51.	NASUNO, et. al., "Polygalacturonase of <i>Erwinia carotovra</i> ", <i>J. Biol. Chem.</i> , 1966, 241:5298-5306;	
	52.	REVILLA, et. al., "Addition of pectolytic enzymes: an enological practice which improves the chromaticity and stability of red wines", <i>International Journal of Food Science & Technology</i> , 2003, 38(1):29-36.	
	53.	TAMARU, et. al., "Pectate lyase A, an enzymatic subunit of the <i>Clostridium cellulosovorans</i> cellulosome", <i>PNAS</i> , 2001, 98(7):4125-4129.	

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. ¹Applicant's unique citation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

SEND COMPLETED FORM TO: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450